

942.3

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AUG 15 1985

Permit No. WA-002959-9 (1)

Issuance Date 9/21/77

Expiration Date 7/1/82

*Still current as of 8/85, because SD
reapplied in timely fashion + WDOE hasn't
yet decided on terms for a new permit.
phone conversation
w/mike Dawda*

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT

RR

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504

In Compliance with the provisions of
Chapter 90.48 RCW as amended
and

The Federal Water Pollution Control Act Amendment of 1972,
Public Law 92-500

CITY OF SEATTLE
Department of Lighting
1015 Third Avenue
Seattle, Washington 98104

Plant Location: ~~Lake Union~~

Receiving Water: Lake Union

Nelson Place & Fairview Avenue
North, Seattle, Washington

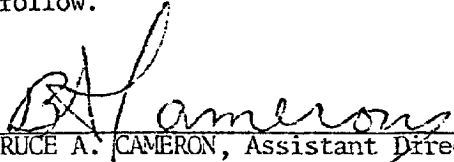
Discharge Location: Outfalls 001 & 002

Latitude: 47° 37' 52" N
Longitude: 122° 19' 35" W

Industry Type: Fossil Fuel Electric
Power Generation

Waterway Segment Number: 04-08-01

is authorized to discharge in accordance with the special
and general conditions which follow.


BRUCE A. CAMERON, Assistant Director
Department of Ecology (2)

CTY0068966

SEA315380

SPECIAL CONDITIONS

S1. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

After June 30, 1977, the permittee is authorized to discharge subject to the following limitations and monitoring requirements:

- a. OUTFALLS 001 and 002 - Two adjacent discharges (once through cooling water and steam condensate).

Parameter	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
	Daily Maximum	Monthly Average	Minimum Frequency	Sample Type
Flow, MGD	41	-----	Weekly	Gauge
Temperature Increase, °C	There shall be no violation of water quality standards outside of the established Dilution Zone. ²		Weekly ¹	Grab
Temperature of Discharge at Outfall, °C	----	----	Weekly	Grab
pH	Shall be in the range of 6.0 - 9.0		Twice Monthly	Grab
Power Generation, kwh	----	----	Continuous	Daily Average
PCB	There shall be no discharge of Polychlorinated Biphenyl Compounds such as those commonly used in transformer fluids.			
Cl ₂ (free available) mg/l	0.5 mg/l	0.2 mg/l	Twice Yearly*	Grab
Dissolved Oxygen	----	----	Twice Weekly ¹	Grab

* Samples to be taken only during periods of chlorine use.

- a. **OUTFALLS 001 and 002 - Two adjacent discharges (once through cooling water and steam condensate).** (Continued)

Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit may discharge free available or total residual chlorine at any one time.

"Temperature Increase" is the difference between the intake and outfall temperatures averaged for the adjacent intake and discharges.

The above monitoring shall be applicable only when the plant is operating for other than test purposes.

The daily maximum is defined as the greatest allowable value for any calendar day.

The monthly average is defined as the average of the daily values for 30 consecutive days.

- ¹ During the months of July, August, and September, temperature and dissolved oxygen shall be measured three times weekly. Sample Points for temperature monitoring are defined as follows:

SAMPLE POINTS - Sample shall be taken at each station (3) at depths of one and five feet.

Point #1 - From Outfall 001, at a distance of 300 feet in a direction of N 60° W.

Point #2 - From Outfall 001, at a distance of 300 feet in a direction of N 35° W.

Point #3 - From Outfall 002, at a distance of 300 feet in a direction of N 30° W.

During the rest of the year, the temperature shall be monitored weekly and dissolved oxygen twice weekly at the same sampling points listed above.

- ² **Definition of Dilution Zone:** This zone shall encompass 160,000 square feet of Lake Union adjacent to the City of Seattle Department of Lighting's Facility. It shall extend from the east side of the Fairview Avenue East causeway in an arc of 300 feet from each discharge point (Discharges 001 and 002), and will encompass that portion of Lake Union within the confines of each arc. The zone shall include the water contained in the above described area from the lake surface down through the entire water column. All waters other than those described above are considered to be outside the established dilution zone.

S2. BOILER BLOWDOWN

After June 30, 1977 and lasting until the expiration date of this permit, the permittee is authorized to discharge boiler blowdown subject to the following limitations:

Boiler blowdown shall be manifolded so that all boiler blowdown water will be discharged into the main condenser discharge lines resulting in boiler blowdown being thoroughly mixed with the water from the condenser discharge before entering Lake Union.

EFFLUENT LIMITATIONS

MONITORING REQUIREMENTS

<u>Parameter</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Suspended Solids	100 mg/l (7 lb/d)	30 mg/l (2 lb/d)	Weekly	Grab
Oil and Grease	20 mg/l (1.5 lb/d)	15 mg/l (1 lb/d)	Weekly	Grab
Copper	1 mg/l (.07 lb/d)	1 mg/l (.07 lb/d)	Weekly	Grab
Iron	1 mg/l (.07 lb/d)	1 mg/l (.07 lb/d)	Weekly	Grab

Boiler feed additives containing deleterious materials such as chromic acid shall not be utilized.

The daily maximum is defined as the greatest allowable value for any calendar day.

The monthly average is defined as the average of daily values for 30 consecutive days.

Monitoring shall be conducted only when the plant is operating for other than test purposes.

S2a. At least two working days prior to a scheduled discharge, the Washington State Departments of Game, Fisheries, and Ecology shall be notified of intended operation. Monitoring shall be conducted according to the preceding schedules during periods of plant operation for other than test purposes. In addition, the following are hereby made conditions of this permit:

1. If the dissolved oxygen concentration outside the established dilution zone drops below 8 mg/l, the Washington State Departments of Game, Fisheries, and Ecology shall be notified within one working day after sampling demonstrates concentrations below 8 mg/l.
2. If discharge occurs during the out-migration period for salmonids, April through June, a brief investigation shall be conducted as to the disposition of salmonids near the intake structures and warm effluent. Correlating dissolved oxygen and temperature profiles shall be taken.
3. If discharge occurs during the adult migration (June through October), a brief study shall be made to determine how many salmon congregate in the warm effluent and for how long.

S3. MONITORING AND REPORTING

The permittee shall monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the waste discharged. A record of all such data shall be maintained. The permittee shall monitor the parameters as specified in Conditions S1 and S2 of this permit.

a. Reporting

A brief report shall be forwarded within 30 days after each operation period including data gathered specifying the duration of discharge and power production, and additional information as required. The document shall be sent to the Northwest Regional Office of the Department of Ecology, 4350 - 150th Avenue N.E., Redmond, Washington 98052.

b. Records Retention

The permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Director.

S3. MONITORING AND REPORTING (Continued)

c. Recording of Results

The permittee shall record each measurement or sample taken pursuant to the requirements of this permit for the following information: (1) the date, exact place, and time of sampling; (2) the dates the analyses were performed; (3) who performed the analyses; (4) the analytical techniques or methods used; and (5) the results of all analyses.

d. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and nature of the monitored discharge.

e. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the Department, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR Part 136, as published in the Federal Register on October 16, 1973, or the latest revision thereof, which references the following publications:

1. American Public Health Association, Standard Methods for the Examination of Water and Wastewaters (13th Edition 1971).
2. American Society for Testing and Materials, A.S.T.M. Standards, Part 23, Water, Atmospheric Analysis (1970).
3. Environmental Protection Agency, Water Quality Office Analytical Control Laboratory, Methods for Chemical Analysis of Water and Wastes (April, 1971).

A dissolved oxygen probe may be utilized so long as it is calibrated periodically against a method conforming to the above references.

S4. OTHER REQUIREMENTS

- a. Prior to scheduled operation, the Washington State Departments of Game, Fisheries and Ecology shall be notified. Notification shall be at least two working days prior to discharge. During periods of unseasonable cold winter weather, operation may occur on the day of notification.
- b. Notification of the Washington State Departments of Fisheries, Game and Ecology shall be made within one working day after commencing to discharge due to "emergency conditions." "Emergency conditions" resulting in discharge are defined as an act of God, war, sabotage, or equipment failure which results in a significant sudden reduction in available base load power to the State of Washington, Puget Sound Basin or Greater Seattle Area. Such operation does not include power shortages resulting from low river flows, normal equipment repair and maintenance, or failure of standby generating facilities with thermal discharge.
- c. All conditions and requirements of the Washington State Departments of Game and Fisheries with regards to screening of intakes are hereby made a condition of this permit.
- d. Sanitary sewage shall be discharged into the sanitary sewer.
- e. All requirements and ordinances of the Municipality of Metropolitan Seattle and the City of Seattle Sewer Department pertaining to the discharge of wastes into the sanitary sewer are hereby made a condition of this permit.

GENERAL CONDITIONS

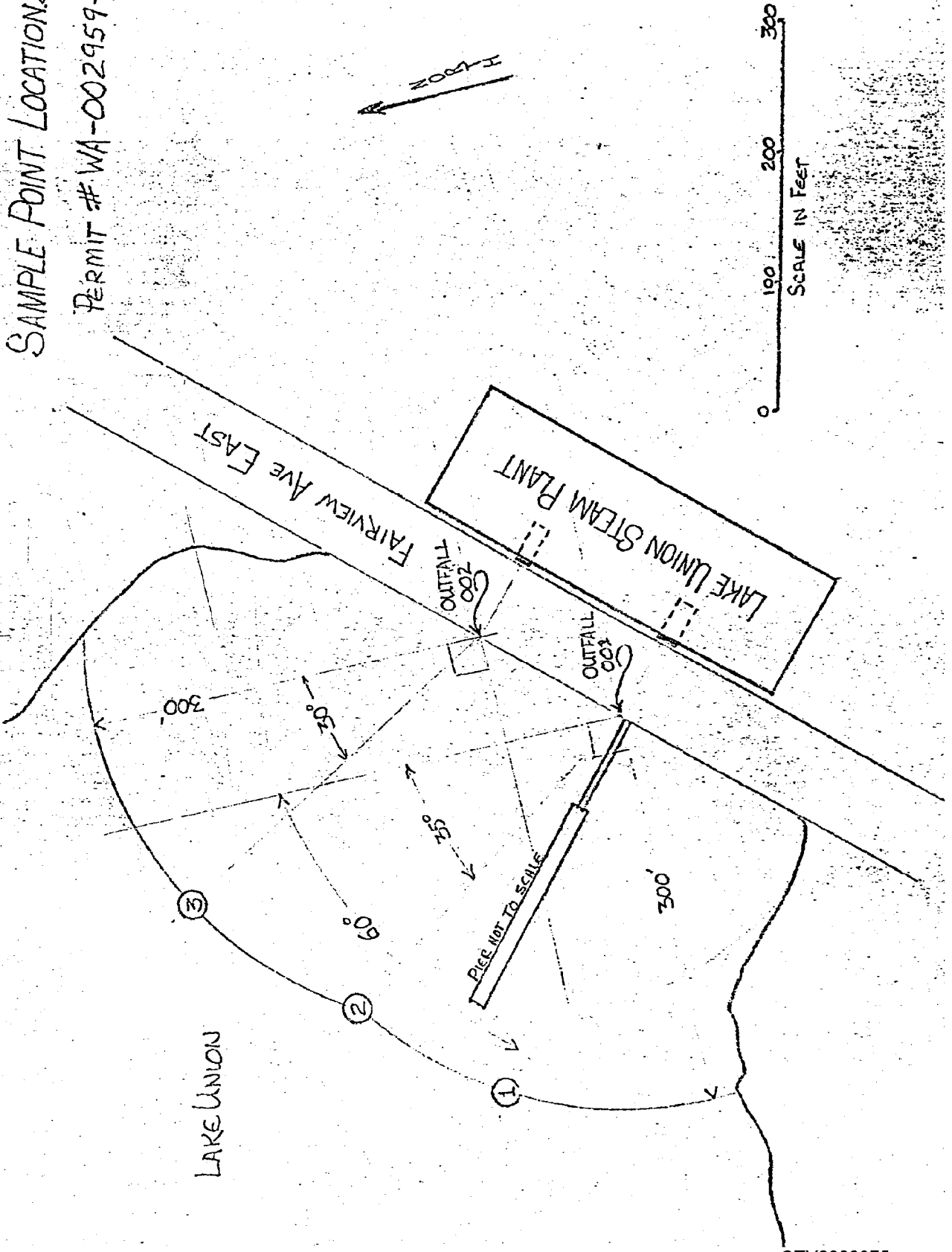
- G1. All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.
- G2. Any anticipated facility expansion, production increase or process modification which will result in a new or increased discharge of pollutants must be reported to the Department by submission of a new application or supplement thereto; or, if such discharge will not violate effluent limitations specified herein, by submission to the Department a notice of such new or increased discharge.
- G3. The diversion or bypass of any discharge from facilities utilized by the permittee to maintain compliance with the terms and conditions of this permit is prohibited, except (a) where unavoidable to prevent loss of life or severe property damage, or (b) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this permit. The permittee shall immediately notify the Department in writing of each such diversion or bypass in accordance with the procedure specified in Condition G4.
- G4. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause, such as an act of nature, the permittee shall:
- a. Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.
 - b. Immediately notify the Department so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken.
 - c. Submit a detailed written report to the Department describing the breakdown, the actual quantity and quality of resulting waste discharges, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

- G5. The permittee shall at all times maintain in good working order and efficiently operate all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
- G6. After notice and opportunity for a hearing, this permit may be modified, suspended or revoked in whole or in part during its term for cause including but not limited to the following:
- a. Violation of any terms or conditions of this permit;
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
 - c. A change in the condition of the receiving waters or any other condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- G7. The permittee shall, at all reasonable times, allow authorized representatives of the Department:
- a. To enter upon the permittee's premises for the purpose of inspecting and investigating conditions relating to the pollution of, or possible pollution of, any of the waters of the state, or for the purpose of investigating compliance with any of the terms of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect any monitoring equipment or monitoring method required by this permit; or
 - d. To sample any discharge of pollutants.
- G8. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307 (a) of the Federal Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified. Section 307 (a) requires that the Administrator of the Environmental Protection Agency shall promulgate effluent standards (or prohibition) for toxic pollutants which he has listed as such.
- G9. Nothing in this permit shall be construed as excusing the permittee from compliance with any applicable Federal, State, or local statutes, ordinances, or regulations.

SAMPLE POINT LOCATIONS

PERMIT # WA-002959-9



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